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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/643,993	08/23/2000	Magnus Oberg	2466-69	3192

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NIXON & VANDERHYE P.C.
8th Floor
1100 North Glebe Road
Arlington, VA 22201-4714

EXAMINER

TRAN, DZUNG D

ART UNIT	PAPER NUMBER
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2633

DATE MAILED: 04/11/2003

17

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/643,993

Applicant(s)

OBERG ET AL.

Examiner

Dzung D Tran

Art Unit

2633

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on Amendment filed on 08/13/2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 29-62 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 29-32 and 46-49 is/are allowed.
- 6) ☒ Claim(s) 33, 34, 40-45, 50, 51 and 57-62 is/are rejected.
- 7) ☒ Claim(s) 35-39 and 52-56 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Specification

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 33 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Labiche et al. U.S. patent no. 5,241,610.

Regarding claims 33 and 50, Labiche clearly discloses an optical WDM network comprising at least two nodes, interconnected by an bi-directional optical link (figure 2), at least one of the node comprising: at least two pairs of ordinary optical transmitters (figure 4A, elements LASER 1, LASER 2) and ordinary optical receivers (figure 4A, elements RCVR 1, RCVR 2), each pair including an ordinary optical transmitter receiving electrical signals and converting the received electrical signals to optical signals (figure 4A, elements LASER 1, LASER 2) and an ordinary optical receiver receiving optical signals and converting the received optical signals to electrical signals (figure 4A, elements RCVR 1, RCVR 2) and a spare transmitter (figure 4A, elements B/U LASER), the spare transmitter arranged to issue the optical signal to another node, if the ordinary optical transmitter fails (figure 6, column 5, line 25 to column 7, line 31). Labiche differs from claims 33 and 50 of the present invention in that Labiche does not

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specific discloses transmitter receiving electrical signals and converting the received electrical signals to optical signals and optical receiver receiving optical signals and converting the received optical signals to electrical signals. Since it is well known in the art that optical transmitter always has a laser for converting electrical signals to optical signals and optical receiver always has a photodiode for converting the optical signals to electrical signals. Furthermore, Labiche teaches communication. It would have been obvious to have an input electrical modulated signal in order to provide the communication signal.

3. Claims 33, 34, 40, 42, 43, 45, 50, 51, 57, 59, 60 and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi U.S. patent no. 6,172,782 in view of Labiche et al. U.S. patent no. 5,241,610

Regarding claims 33 and 50, Kobayashi clearly discloses an optical WDM network comprising at least two nodes, interconnected by an optical link (figure 2 of Kobayashi), at least one of the node comprising: at least two pairs of ordinary optical transmitters (figure 2, elements 7 of Kobayashi), and ordinary optical receivers (figure 7, elements 10), each pair including an ordinary optical transmitter receiving electrical signals and converting the received electrical signals to optical signals (figure 1, elements 12), and an ordinary optical receiver receiving optical signals and converting the received optical signals to electrical signals (figure 7, elements 26), and a spare transmitter (figure 1, elements 12), the spare transmitter arranged to issue the optical signal to another node, if the ordinary optical transmitter fails (figures 1, 2, column 4, line 16 to column 6, line 5). Kobayashi differs from claims 33 and 50 of the present

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invention in that Kobayashi does not specific disclose bi-directional optical system.

Labiche discloses a bi-directional optical system (figure 2). At the time of the invention was made, it would have been obvious to a person of ordinary skill in the art to include the teaching of Labiche in the system of Kobayashi. One of the ordinary skill in the art would have been motivated to do this since bi-directional optical system allow the optical system transmit the optical signals back and forth, it also creates a ring network with two or more nodes.

Regarding claims 34 and 51, Kobayashi or Labiche further discloses an optical switch connected to an ordinary optical transmitter and a spare transmitter to forward optical signals from only one of the ordinary optical transmitter and a spare transmitter (figure 7, element 29 of Kobayashi), (figure 4A, elements 105a, 105b, 1055, 105d of Labiche).

Regarding claims 40 and 57, Kobayashi further discloses all the receivers connected to a single demultiplexer (figure 7, element 25).

Regarding claims 42, 43, 45 and 59, 60 and 62, Labiche further discloses a spare receiver (figure 5B, element B/U RCVR).

4. Claims 41, 44, 58 and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Labiche et al. U.S. patent no. 5,241,610 or Kobayashi U.S. patent no. 6,172,782 in view of Labiche et al. U.S. patent no. 5,241,610 and further in view of Takehanna et al. U.S. patent no. 6,081,359.

As per claims above, Labiche and Kobayashi disclose all the limitations except for a switch provided to conduct an optical from the demultiplexer to at most of the

ordinary receivers. Takehana in figure 3 clearly disclose an optical WDM network having transmitting system and receiving system, wherein all the ordinary receivers (figure 3, elements 16-1, 16-2..16-n) connected to a single demultiplexer (figure 3, element 14), a switch provided to conduct an optical from the demultiplexer to at most of the ordinary receivers (figure 3, element 42), this optical signal being in the same wavelength band as the optical signal issued by a spare transponder (figure 3, element 13-r). It would have been obvious to an artisan at the time of the invention was made to include the transmitting apparatus and receiving apparatus of Takehana in the system of Labiche or Kobayashi in order to obtain a reliability optical system.

5. Claims 29-32 and 46-49 are allowed.

6. Claims 35-39 and 52-56 are objected to as being dependent upon the rejected base claims, but would be allowable if rewritten in independent form including all of the limitations of the base claims and any intervening claims.

Response to Arguments

7. Applicant's arguments with respect to claims 33-45 and 50-62 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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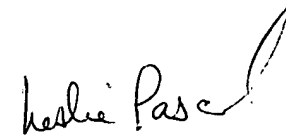
- a. Sutter et al. U.S. patent no. 5,760,934. Ring network for transmitting wavelength multiplexed informations
- b. Mestdagh et al. U.S. patent no. 5,299,293. Protection arrangement for an optical transmitter/receiver device
- c. Harano U.S. patent no. 5,943,146. Optical transmission system

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dzung Tran whose telephone number is (703) 305-0932.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Jason Chan, can be reached on (703) 305-4729.

The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.


LESLIE PASCAL
PRIMARY EXAMINER